

Electric Circuits Analysis Methods



Component

École Nationale
Supérieure
d'Électrotechnique
d'Électronique
d'Informatique
d'Hydraulique
et des
Télécommunications



Semester
Automne

In brief

- > **Amety's Code:** N5EE04A
- > **Open to exchange students:** Yes

Presentation

Objectives

Understand methods for analyzing electrical circuits under any time domain and under steady-state sinusoidal conditions. Become familiar with the formalism and software used in industry.

Description

- Signals and systems: definitions, linear systems with time invariance.
- Circuit generalities: elements, energy relations, units.
- Laplace transform: properties, applications in differential equations.
- sinusoidal steady state: Bode and Nyquist plot, energy
- General theorems: various equivalents. Quadripoles.